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## ANNUAL ADDRESS

OF

#### THE PRESIDENT

OF THE

## SOUTH INDIAN BRANCH

OF THE

## BRITISH MEDICAL ASSOCIATION.

BY

Surgeon-General G. BIDIE, M.B., C.I.E., C.M.Z.S., London, &c.

Delivered at the Museum, Madras, on the 2nd March, 1888.

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# Meeting held at the Central Museum, Madras, on the 2nd March 1888.

THE PRESIDENT IN THE CHAIR.

Annual address of the President of the South Indian Branch of the British Medical Association, by

Surgeon-General G. Bidie, M.B., C.I.E.

GENTLEMEN,

I have to thank you for having re-elected me President of the South Indian Branch of the British Medical Association. During the past year the Branch has been strengthening its stakes and lengthening its cords, and the monthly meetings have been regularly held and rendered interesting by the reading of many excellent papers. It is to be regretted that the modesty of up-country members has prevented them from sending us many contributions. Most of them enjoy rich fields for clinical research, and will I hope during the current year favour us more often with the results of their experience. I would also in conjunction with my fellow members at the Presidency inform them, that we will gladly welcome anything they may be good enough to send us and assure them, that we do not think that the entire talent of the service is confined exclusively to the city of Madras.

Members.—The year 1887 closed with 71 members on the roll of the branch, against 68 on the 31st December 1886. This is so far satisfactory as it shows that we are gaining somewhat in strength, although slowly. One advance has been the opening of our portals to gentlemen in the grade of Assistant Surgeon. This is a step in the right direction, as in an association of this kind the ties that bind us are not dependent on rank, but on professional status and brotherhood. We have therefore extended the hand of fellowship to University Graduates in the position of Assistant Surgeon, and mean it. The total number of new members who joined during the year was 8, while 3 retired and 2, Surgeon-Major Lawrenson and Surgeon Adams, died.

Meetings.—During the year 11 meetings were held with an average attendance of 13 members at each, and our thanks are due

to Dr. Thurston, Superintendent of the Central Museum, for the use of the convenient room in which the meetings were held.

Papers read.—Forty-nine contributions, with 25 morbid specimens and ten drawings, were brought before the branch. All the papers except 5 were from Madras members. Four numbers of Transactions, with illustrations, were published during the year and presented to members.

Our position as a Branch of the British Medical Association.—Gentlemen, the association to which we belong places us all in federation on one common platform as members of a benevolent and noble profession.—

- "The rank is but the guinea stamp,"
- "The man's the gowd for a' that."

All of us value highly the position which we occupy as servants of Her Majesty and members of an official department, but I feel sure every one here prizes still more the prouder eminence which is ours, as representatives of a learned profession which has for its aim the relief of suffering humanity. "Homines ad deos nullâre proprius accedunt quam salutem hominibus dando." I think too our bond of union and our utility as a society might be greatly increased by the appointment of a Standing Committee to which individual members, either at the Presidency or in the Mofussil, could when in difficulty refer for advice on points of practice, pathology, sanitation and professional ethics. We are one and all liable to be placed in circumstances in which such aid and support would be very valuable, and I shall be glad if the members will give due consideration to this suggestion.

Our work in South India. Last year from this place I took occasion to say, that "we are so to speak the Missionaries of Medical Science in this foreign land" and it occurs to me now to remark, that in all our ways and works we ought to keep this phase of our position specially in view. Whatever sparks of medical knowledge exist in Southern India, these have, almost without exception, been lighted and fanned by members of our service. Thousands of subordinates have been trained in our hospitals and medical colleges, who have gone forth to do excellent service not only in the tented field but also in civil stations; and for some years we have also been training women so that they may be useful to their sick sisters. But although

thousands have gone forth, thousands more are required, and it remains for those now in harness and those who will follow us to carry on this all-important work. It is also a source of great gratification to one and all of us to think of the large number of charitable hospitals which, through our influence, have sprung up all over the country, from the hyperborean regions of Ganjam to the torrid sands of Comorin. But as Rome was not built in a day, neither have these institutions been erected and organised without much labour and trouble on the part of our predecessors. Brick by brick they have come into existence, and now we enjoy the fruits of the toil of those who went before us. Let us record our gratitude to them. To those who ask what we have been doing we have to say, look around you! When I landed in Madras thirty-two years ago there were but 38 civil hospitals in all this Presidency, and to-day there are 349. Every one of these hospitals however humble is doing good work, and as a whole they have, I believe, given us a place in the gratitude of the people more valuable than crores of rupees, and created a monument recording our labours more enduring than marble or brass. These small dispensaries are so to speak the advanced posts of the movement by which we hope to put skilled medical aid within reach of the entire population, and at the same time banish from the field the ignorant native practitioners who do so much injury all over the country. Of these the greater portion consists of unmitigated quacks trusting chiefly to charms and incantations. Even the better classes of them cling to a system which is but a feeble echo of the doctrines of Galen, while their anatomical knowledge is comprised in the doctrine that the navel is the principal seat of life and origin of all the vessels. For some time after we began our work the native medicine-man despised our operations, but of late finding his occupation in many cases threatened with extinction, the usual war has begun which always occurs when knowledge has to conquer ignorance. If these men were harmless it would not be necessary to trouble ourselves about them, but there can be no doubt that through their ignorance many men and women annually lose their lives. One of the most pressing and difficult questions of the day is therefore, how to secure complete and early victory. In the first place we cannot with our existing means educate men and women in sufficient numbers to occupy the entire field, and in the second

although such a staff were available, the people could hardly as yet afford to pay for it; or possibly it would be more correct to say consent to pay, for as India absorbs about one-fourth of the gold and one-third of the silver produced throughout the world, she can hardly be called a poor country. It seems to me, however, that so long as the native practitioner exists we ought to try to do something towards enlightening him by means of a simple cheap literature in the vernaculars, explaining the nature of the more common and serious diseases and our modes of treatment. This could do no harm and it might prevent a good deal of mischief. We might also when practicable encourage such men to visit our hospitals, with the view of their perchance picking up some crumbs of knowledge. In recommending such measures I aim chiefly at rendering this class of practitioners less dangerous, and that I fear is nearly the most that we can do. In a district lately visited by me the local authorities have actually alloted funds to support a staff of these men, so that you will see how strong their hold still is in some quarters on the minds of the native public. Populus vult decipi et decipiatur. On the other hand the head-quarter hospital of the district, in which this strange liberality has been displayed, is greatly hampered for want of funds. Such action can only be regarded as a vicious freak of local self-government or pure cussedness, and I trust when the proposal comes up for the sanction of the superior authorities, it will be quashed.

Vaccination.—Another subject which deserves our attention is the backward state of vaccination. During the 20 years ending 1885 the deaths from small-pox in South India averaged over 33,000 per annum, and we may fairly estimate that for every death quite 10 persons had an attack of the disease, and suffered mutilation more or less severe. No pains would be too great to prevent such mortality and loathsome sickness, and in vaccination we have a certain preventive. The vaccine virus was first brought to Madras in 1802 and ever since much trouble has been taken and much money spent in trying to get the people to accept vaccination, but without commensurate snecess. Although the educated natives of Madras are usually very amenable to reason and although the proofs in favour of vaccination are just as clear and strong as a proposition of Euclid, they have refused to be convinced. To meet superstitious

and other scruples, and also for more valid reasons, vaccination from the calf has been introduced, so that even the most bigoted of its opponents have now been left without any tenable excuse for its neglect. Of all the children born, not more than 16 to 17 per cent. get thus protected, so that the proportion of the people liable to suffer in infancy and youth from the cruel ravages of small-pox is very great. Much may be done by Revenue officials: in districts in which they take a lively interest in vaccination it flourishes, and in quarters in which it is regarded in a luke-warm spirit it flags. District Surgeons and Subordinates ought therefore not only to do all in their power to support the means adopted by Collectors and others, but to make special efforts on their own account. In short I would like to see them enthusiasts in vaccination, never losing a chance to press its claims and extend its protective influence. And as imperfect vaccination is apt, amongst the people with whom we have to deal, to bring it into disrepute, great care should be taken that the lymph is good and the operation properly performed. The Sanitary department are labouring hard to extend vaccination, but unless they are backed up by us, both in our public and private capacities, their efforts will be like the ripples that are caused by a stone cast into a lake, which become fainter and fainter as they radiate from the original point of contact. The moral effect of successful vaccination would also at the present crisis be very great, as we could point to it as one triumph of proventive medicine and so probably get the people to believe more readily in the value of other efforts which wo wish them to make, with a view to obviate certain zymotic diseases.

Sanitation in South India.—The carrying ont of Sanitary improvements in India is one of the most pressing and at the same time one of the most difficult problems of the day. On the one hand we see the population being mowed down like grass by terrible epidemics, and on the other we can, under existing circumstances, do so little to prevent this destruction. The four great destroyers of human life in the Madras Presidency are cholera, small-pox, fovers and bowel-complaints, the average deaths from these alone every year amounting to about 339,000. People sometimes allude with horror to the awful loss of life and to the grief and misery caused in Europe by that pastime of Princes called war;

but the losses thus entailed are but a trifle compared with those that result in South India from the four diseases mentioned. Thus in the 50 years ending 1886 the total losses to England, France, Germany and Austria on battle fields amounted to but 368,000, against our annual 339,000. Sometimes as I think of this awful destruction I feel greatly discouraged, because so little is being done to prevent it. The fact is that people in general do not realise how terrible is the mortality going on in our midst, because it is distributed over too large an area to come home to them personally. It is our duty, however, never to lose sight of such facts, and to keep them prominently before the responsible authorities. One difficulty is to get them to realise the magnitude and difficulty of the task involved, before we can hope to stamp out epidemic disease in Madras, and render it even fairly healthy. The whole country is studded with towns and villages which have been rendered terribly foul by the filth and neglect of centuries, and the improvement of which involves some of the most difficult problems which can engage the attention of the sanitary expert and the sanitary engineer. But although the outlook at present is not bright it is not quite hopeless, for the educated members of the population are beginning to have a glimmering of the value of cleanliness in houses and towns, which will increase as they become more and more permeated by the knowledge of the west. also be anticipated that the improved sanitation of schools will have a good influence, as new generations growing up under superior conditions must carry away some useful practical lessons. The real difficulties as regards sanitation in Southern India are the want of money and of men to spend it, when got, to the best advantage. In England, and in fact wherever sanitation is making any progress, the management of improvements is not left in the hands of local authorities, but confided to specialists, and the greater the progress the greater the number of these agents required. But the first step towards radical improvement in Indian town and village conservancy must be the provision of the wherewithal. Money and a good deal of it will be required, and it is futile to try to carry out such expensive improvements as water supply and drainage schemes out of the current revenue. I challenge any one to point to any part of the world, in which large permanent works of such a kind have been executed in this way. The cost of such

improvements ought not to be wrung out of the pocket of tho present generation, but should form a burden of which those who come after will, for benefits received, have to bear a share. There are also other objections to the carrying out of large sanitary schemes by small annual grants. Work carried out in instalments is always costly, and liable to be interrupted or abandoned whenever any financial pressure occurs; and there is the risk of the man who conceived or worked out the plans being removed, owing to sickness or other cause, while it is in progress. In this country we have had numerous instances of this spasmodic manner of carrying on public works, and the results have not been satisfactory. What we must first do is to make the people realise that certain improvements must be carried out as speedily as possible, and that they. must find the money. For a long time we have been in the habit of treating them as if they were utter paupers, and have not tried to develop in them the habit of self-help. It is not intended to imply that they are generally wealthy, but that there is an enormous amount of dormant capital secreted in the bowels of the earth or locked up in useless jewelry, no one who knows anything of the hoarding propensity of the people will deny. We must therefore show them that by the utilisation of this capital, the desired improvements may be carried out. I would propose to vitalize such money by investment in loans, to be raised for the carrying out of municipal and local improvements. The bonds should be for very small sums say Rs. 10 each, and bear interest at the rate of 3 or 4 per cent: I feel sure that with a little continuous care and trouble. and the aeputation of a Government official, whom the people know and would trust, to explain matters to them, such a measure could be carried out with immonse benefit to the country. In the first place idle savings would be made profitable, secondly the health and comfort of the population would be greatly improved and in the third place every bond-holder would have a direct personal interest in such improvements. Then the interest accruing would go along way towards paying the necessary increase in taxation, to which the bond-holder would be subjected. He would soon realiso too that his money would be safer and more profitable in municipal bonds than in jewelry or buried hoards, as the paper would be transferable and might be used as security in case of a personal loan being required. On such security also the native

banker could afford to lend money at a much easier rate of interest than at present. There are also other obvious advantages to be gained by utilising the public savings in this way, but as these belong rather to the political economist than to the Sanitarian, they need not be noticed here.

One very hopeful feature in Sanitary science at the present day is the great advances that are being made in bacteriology. Although we have not as yet discovered the actual germs which produce some of the most destructive epidemics, such as cholera and malarial fever, yet we have enough positive knowledge to give us the strongest reasons for believing that these and kindred diseases are propagated by specifie bacteria, and even this much is very helpful in preventive medicine. Thus we know that certain germs which grow and multiply in putrid substances are capable when introduced into the animal body of producing anthrax, erysipelas, septicemia, &c., and that by destroying the breeding grounds of the organisms we can stamp out these fatal ailments. In other words these diseases are in a measure under human control, and so from analogy we feel sure are the great zymotic scourges of India, viz., cholera and fever. We now in short know the weak points of our old epidemic enemies, so that their final conquest is certain and but a matter of time and money. Again both town and village communities are beginning, under the instinct of self-preservation, to recognise the extreme importance of pure water and removal of sewage as preventives of sickness, and it is now our pleasent duty to try to encourage and direct this salutary wave of public opinion. Much will depend on our energy, knowledge, tact and sagacity. Of late too, Europe has begun to resent the devastating epidemics which moving westward from our shores carry destruction into her fairest eities, restrict intercourse and interrupt trade and commerce. Our position therefore is a proud but responsible and trying one, as our efforts to exterminate cholera will be critically watched by the whole civilised world. But I do not shrink from the ordeal, feeling confident, that my medical brethren of all grades will in this contest, even as on the battle fields of former days, show that they can, and will, do all than men can do. At present outside of municipalities the law is very defective in all that relates to sanitation. The Local Boards Act of 1884, which ought to give the power to carry out all necessary

sanitary measures in villages, is almost silent on such matters. It is true, recourse can be had in urgent cases of breach of sanitary rules to the Penal Code, Code of Criminal Procedure and Police Act, but these are clumsy and irritating methods of dealing with such offences as fouling of water, spreading of infectious diseases and committal of nuisances. What we want is to have the Local Boards Act made more comprehensive, so that we should not require to go beyond it in order to carry out the many improvements so urgently wanted in all villages, especially as regards protection of water and removal of sewage. Till the law is simplified and amplified in the directions mentioned, it will be impossible to deal in a practical and effectual manner with the multitudinous breeding grounds of cholera and other epidemics.

We have in 1887 as a profession in South India had, a busy, and some of our number, a trying year. Both officers and subordinates in various places were for months wrestling with cholera, walking amongst dead men, and personally braving death every hour of the night and day. Gentlemen, I feel sure you will join with me in expressing high appreciation of such devotion and toil and in conveying to our fellow-labourers satisfaction that they have been spared to do more good work. Ours is a profession that offers but few rewards, save the satisfaction of useful and benevolent work faithfully done and the gratitude of the poor. I am glad therefore to be able to conclude this address with the highly appreciative remarks of so sage a man, and so distinguished a soldier, as Sir Neville Chamberlain, lately our honoured Commander in Chief.—He says.—

"You are right in supposing that I have expressed an opinion that the peaceful and civilising influence of the work done in the hospitals and by regimental surgeons on the frontiers of India has been in political importance equivalent to the presence of thousands of bayonets. I have held this opinion because no amount of military eoereion or of purity of administration could have exercised the same pacifying effect on the heart of the natives that has been produced by the sympathetic care and successful treatment of diseases, many of which had been previously considered incurable. Throughout my service on the frontier of India I have not known a time when the halt, the lame, and the blind have not flocked into our cantonments or into our camps in search of relief from suffering; and, however distasteful may have been the sight of our soldiers, or however galling the idea of subjection to British yoke, the people have come with confidence from far and wide to seek

medical aid. The fame of the English doctors has spread beyond our frontiers into the remotest hills and glens, and the difficulties overcome and suffering endured in order to reach a medical officer might seem incredible to those unable to realise what it is to be living under conditions devoid of medical and surgical aid. Another humanising and reconciling influence has been the careful and sympathetic treatment of the wounded enemy who have fallen into our hands, and the fact of their being liberated and sent back to their homes when cured. It is because of such unexpected philanthropy that, as conquerors, we hold a position in the minds of the people which would not otherwise be possible. The great question to be solved in the future is, that of how we can best bridge over the chasm which separates the rulers from the ruled. The means of acomplishing this end may be mainly hoped for in the sympathy to be created between the races; and I think the medical profession will always have it in its power to give most important aid towards the attainment of this object."



(Read at Meetings of Society, Edinburgh and Glasgow, April 1889.)

By George A. Turner, M.D., C.M.,

Hon. Sec. Glasgow Branch, R.S.G.S.

Medical Missionary for twelve years at Apia, Samoa.

(With a Map.)

SAMOA is the name of a group of volcanic islands in the centre of the Pacific Ocean. They are situated 2500 miles in a straight line from Sydney, about 4000 miles from San Francisco, and rather more than 400 miles from the British Colony of Fiji. Rose Island, 80 miles east of Samoa, is often erroneously enumerated as one of the group. It is a low uninhabited coral island, which is covered at high water with the exception of two small banks, the larger of which is not more than 30 feet

high, and has a few trees growing on it.

The islands of Samoa are twelve in number, but of these only ten are inhabited. They lie between the parallels of 13° 28′ and 14° 22′ south latitude, and the meridians of 169° 30′ and 173° west longitude. It is supposed that they were first discovered by the Dutch expedition under Roggewein in 1722; but the first navigator from whom we have any reliable account of them was Bougainville, who saw them in 1768, and who, struck with the skill which the natives displayed in handling their canoes, named them the "Isles of the Navigators," a name which is often still to be found in the charts, but which has now largely given place to the native name of the group—Samoa. La Pérouse was the next to visit the group. He called there in 1787, and unfortunately came into collision with the natives at Tutuila. A lad who was out at the ship was shot at, and mortally wounded, on account of some real or supposed

<sup>1</sup> Reprinted from The Scottish Geographical Magazine for May 1889.

stealing. When he was taken on land the islanders were enraged, and made an attack on some of the ship's company who were on shore at the time. In the fight which ensued two officers—MM, de Langle and de Lamanon—and ten of the crew were killed.

This was the first of three engagements which have taken place between Samoans and Europeans. The second was the lamentable skirmish between the natives and the marines and blue-jackets of H.M.S. Barracouta, in 1876, when three men were killed and several wounded on the British side, and eight men killed on the Samoan side. The third was the equally lamentable fight of last December, between the Germans and the Samoans, in which of the Germans two officers and sixteen men were killed and thirty-six wounded, and of the Samoans about twelve were killed and thirty-five wounded. Of these three fights, probably the first, and certainly the second, was occasioned by misunderstandings on one or both sides; the third alone seems to have been a deliberately planned engagement. Let us hope it will be the last time that we hear of Europeans and Samoans being engaged in actual warfare.

In 1791 Samoa was visited by H.M.S. Pandora, and from this time onward whaling and trading vessels from the United States and from Australia occasionally touched at the group. Little was known, however, about the islands till 1830, when agents of the London Missionary Society landed and commenced a mission there. They were well received by one of the principal chiefs, and in that way Christianity and civilisation were introduced, and speedily made headway among the natives.

The islands of the Samoan group are all volcanic. On approaching them the high mountains are visible on a clear day 50 or 60 miles off, and on drawing nearer these are found to be thickly wooded to their very summits, which are in some instances as much as 3000 or 4000 feet high. In many places the hills descend rapidly to the coast-line, and form a rock-bound precipitous shore. In others the slope is more gradual; a belt of rich alluvial soil covered with luxuriant tropical vegetation intervenes between the hills and the shore, which is protected from the ocean by a barrier-reef. The distance between the reef and the shore varies from a few yards to three or four miles, and the depth of water inside the lagoon, in some places, especially in the vicinity of reefopenings, is fathoms deep, while in others it is only at high water that even small canoes can find their way along. For the most part the Samoan villages are situated along the shore of these lagoons, which greatly facilitate inter-communication. With the exception of these barrier-reefs, there are no ontlying coral-reefs in the Samoan group such as those which render navigation so dangerous in Fiji and Tonga. Take these facts together—the position of Samoa right in the track of the mail steamers between America and Australia, the height of the land, the absence of outlying dangers to navigation, and the possession of several good harbours, one of them, Pangopango, being the finest in the Pacific, —and one can readily understand how the control of this little Samoan group has become such a vexed question in European and American politics.

The most easterly of the Samoan group are three small islands, collectively called Manu'a. The largest of these is Ta'u or Manu'a Tele. It rises somewhat precipitously to the height of about 300 feet, and then more gradually to the highest peak, which is 2500 feet. Looked at a few miles off, it has been likened to an immense whale lying on the water. It is about 16 miles in circumference. There is fair anchorage on the north-west side, where the principal village, which is also called Ta'u, is situated. Olosenga, the next island of the group, is a narrow strip of land, three miles long, rising abruptly on both sides. The third and smallest of these islands is Ofu. It lies to the westward of Olosenga.

The entire population of these three islands is under 1500.

On 12th September 1866, a submarine volcano broke out in midocean between Ta'u and Olosenga. The following is a condensed account of the occurrence, from an article written at the time by my father, and published in a Sydney newspaper: - "On the 7th September 1866 the natives of Ta'u and Olosenga were surprised by an unusual succession of earthquakes. There would be three or four in the course of an hour. On the night of the 9th there were thirty-nine shocks in all. The motion at first was but a slight tremulous agitation, but its continuance, and the addition of an unusual subterranean 'groaning,' as the natives called it, alarmed every one. On the 12th, a little after noon, a commotion was observed in the deep blue sea, about two miles from Olosenga and three from Ta'u. It appeared like the surf breaking on a sunken rock. Some thought it might be a whale blowing; others that it was a great shoal of fish. This continued all day. By break of day on the 13th volcanic action was unmistakable. At first the eruptions were at intervals of about an hour. They went on increasing till the 15th, when there were fifty in an hour; and then for three days there was one continued succession of outbursts. The natives looked on in amazement at the great jets of mud and dense columns of other volcanic matter rising in terrific grandeur as high, it was said, as the mountain of Matafao in Tutuila. That would be 2000 feet or more. They then branched out into clouds of dust which blackened the sky and covered up Olosenga from the sight of the people on Ta'u. The roar of the eruptions and the collision and crash of the masses of rock met in their downward course by others flying up, was fearful. Quantities of fused obsidian, too, threw off fragments which shone and sparkled in the sunshine with indescribable beauty. No flame appeared. Only once or twice was there a gleam of fire in the matter thrown up. The sea was most violently agitated in a great circular basin half a mile in diameter, and after a time there was a light sulphurous tinge in the ocean for miles away. Heaps of dead fish were washed ashore on Ta'u and Olosenga, and among them deep-sea monsters, six and twelve feet long, which the natives never saw before, and for which they have no name. The sulphurous vapours, heat, smoke, and ashes soon made the settlement in Olosenga unbearable, and the natives fled to a place on the south side of the island. A slight tremulous motion continued to be felt on the land, but no fissures opened, nor did any hot springs make their appearance. The ordinary springs of fresh water were unaffected. After three days the activity of the

4 Samoa.

volcano began to abate, and two months afterwards there were only three or four eruptions in the course of a day, and the height to which the matter was thrown up was reduced to 30 or 40 feet above the level of the sea."

On November 29th, seventy-eight days after the first outburst, volcanic action ceased. In the following January, 1867, it burst up again like "a great spring of water," accompanied by much shaking on the adjacent islands. This continued at intervals till March 14th, 1867, when the action ceased altogether, and it has remained quiescent ever since.

In June 1867, H.M.S. Falcon visited the place, and about two miles distant from Olosenga a distinct cone was made out at a depth of 91 fathoms, the soundings all round about being from 120 fathoms upwards.

The principal point of interest attaching to Manu'a is that, according to one tradition, it was the first part of the group to be inhabited, and from it the Samoan race spread. The hereditary name of the kings of Manu'a is Moa, and according to this tradition the name Samoa is simply this name with the prefix "Sa," which in Samoan means "the family of "—SA-MOA, the family of Moa.

This derivation of the name, however, is exceedingly doubtful. There are several other traditions all referring to one Lu, the son or grandson of Tagaloa of the heavens—the great God who existed in space—and his fowls, moa, which he made sa (sacred, not to be killed), hence SA-MOA,

sacred fowls, or preserve fowls.1

About 60 miles west of Manu'a lies the island of Tutuila. It is 17 miles long, its greatest width is 5 miles, and it contains an area of about 240 square miles. For the most part the coast of Tutuila is rugged and precipitous, rising suddenly to a height of from 50 to 200 or 300 feet. Above this the island is covered with luxuriant vegetation. The centre of it is mountainous, and the highest peak, Matafao, is 2327 feet above the sea-level. The principal settlements are at Pangopango and Leone. The latter is situated on the south-west side, and at this point there is a considerable stretch of level country, constituting it the most productive district of the island. Pangopango, on the other hand, although much more rugged and less fertile, is of much greater importance, on account of its magnificent harbour. This is situated on the south side of the island, which it deeply penetrates, indeed it nearly divides it in two. In approaching Pangopango Harbour from the sea, it looks a very unlikely place to find any shelter. The shore is rugged and inhospitable everywhere. As you draw nearer, however, a passage nearly three-quarters of a mile in width opens up between Tower Rock and Breaker or Devil's Point. Following this in for about a mile, the inner harbour opens out away to the west, disclosing a beautiful land-locked basin about a mile in length, with a width varying from two-thirds of a mile at the entrance to about 400 yards at the other end, and with a depth of from 6 to 20 fathoms. This basin is surrounded on all sides by hills, which rise abruptly to a height of 800 to 1000 feet, its shores being skirted by coral

<sup>1</sup> Samoa a Hundred Years ago, p. 10.

reefs extending from 100 to 200 yards from the beach, which are awash at low water, but immediately outside of which the water is from 4 to 8 fathoms deep. In shape Pangopango has been aptly likened to a retort. The precipitous nature of the hills, causing baffling contrary gusts of wind, constitute the principal danger to vessels which depend on canvas alone, when leaving the harbour. The trade-wind blows almost directly into it, and necessitates their working out against the wind, or waiting, it may be for a week or more, till the wind hanls sufficiently round to enable them to get a favourable slant out. For steamers, however, it is unsurpassed by any harbour in the Pacific—in fact, all the fleets in the world could here ride safely at anchor secure from every wind that blows.

The only danger outside of Pangopango Heads, to be avoided by vessels making the port, is a shoal about 3 miles long and nearly a mile wide the western end of which is about  $1\frac{1}{2}$  miles south of Breaker Point. This shoal, however, has never less than  $4\frac{1}{2}$  fathoms of water on it, and it is only in very rough weather that the sea breaks over it. Within the heads, and half-way from Breaker Point to the harbour, there is a rock about mid-channel called Whale Rock. It is about 20 feet in diameter, and at low tide has only 8 feet of water over it. It is now marked with a buoy, but doubtless it would be a very simple matter to have it entirely blown out of existence. Another and smaller rock, Grampus Rock, is nearer the shore, and is scarcely necessary to mention. Pangopango is the home of the principal chief of Tutuila, Maunga by name.

A little to the east of the entrance to Pangopango Harbour is the small island of Aunuu, 5 or 6 miles in circumference, which lies half a mile off the coast, is about 500 feet high, and has 500 or 600 inhabitants.

On the north side of Tutuila there are several sheltered coves, where good anchorage may be had during the trade-wind season, and on the shores of which there are settlements. One of these is Massacre Bay, the scene of the disaster met with by La Pérouse, which I have already referred to. The population of Tutuila, inclusive of Aunuu, is nearly 4000.

Thirty-six miles to the westward of Tutuila is Upolu, the principal island of the group, though not the largest. It used to be set down in charts under the names of Ojalava, or Oahtooha, an example of how easily the first navigators were led astray in the matter of names. Ojalava is simply the native words O io lava, "it is indeed yonder," doubtless the answer to some question which had been entirely misunderstood, and Oahtooha is the name of the eastern district of the island Atua with the prefix O (O Atua).

Upolu is a beautiful, rich, and extremely fertile island, the most populous and the most important politically of the whole group. It is about 40 miles long by 11 miles in its greatest breadth, and it contains an area of 341 square miles. From east to west runs a range of mountains, many of them from 2000 to 3000 feet in height. On the south side of the island the mountain slopes are for the most part abrupt and rugged, except in a few places, such as Falealili, Safata, and Lefangā, where there are extensive tracts of level land with protecting reefs. On the northern side of the island the mountains are further back from the

coast; from them, here and there, smaller ridges or spurs run down to the sea, and between these there are well-watered, fertile valleys, while towards the western end of the island the hills become lower, and gradually trend away into a long, low point. With one or two exceptions the whole of the coast on the north side and at each end is surrounded by a barrier coral reef, with openings here and there leading into harbours, which are convenient and snug during the trade-wind season. There are several good-sized constant streams—they can scarcely be dignified by the name of rivers-along this coast, the largest of which are one at Falefa in Atua, and the Vai Singano, which falls into the sea at Apia, and to which no doubt the harbour of Apia owes its existence. About onethird from the top of the mountain behind Apia there is a beautiful cataract several hundred feet high on one of the sources of the Vai Singano. This can be seen well out to sea by any vessel a little to the west of the port, but vessels coming from the eastward do not open it out till well within the harbour. There are several other smaller cascades to be seen from the sea on other parts of the island.

The scenery of Upolu is very beautiful. One could scarcely imagine a fairer scene than is got when gliding along at high water in a boat or canoe before a steady trade-wind within one of the Upolu lagoons, the ocean surf dashing on the protecting reef to seaward with an ever constant roar, while to landward, just above the line of white coral sand, the coast-line is marked by a continuous row of cocoanut trees, with their feathery heads waving in the breeze. As bay after bay is opened out quiet villages are seen nestling among the trees; and, higher up, the eye wanders over mountain slopes clad to their very summits with dense forest trees, while here and there a gigantic banyan, with its dark green foliage, is to be seen rearing itself head and shoulders above its fellows.

If you land, however, and go into the interior, as soon as you get beyond the settlements most of the beauty vanishes. You find yourself in a dense tropical forest. Trees of many species meet high overhead, forming a leafy canopy through which the sunshine never penetrates. The ground is strewn with dead and decaying leaves, superficial roots of trees cross and intertwine in all directions, and progress on every hand is interrupted by vines and creepers which hang from almost every bough. The air is still and oppressive. As you get nearer the mountain summits the vegetation gets less rank, the trees are more stunted in their growth, but yet everywhere one is walking in a forest, and if the ascent has been gradual the first indication you may get of having reached the top and commenced to go down on the other side is that you begin to notice the streamlets you pass trickling in the opposite direction from those passed before.

Of the mountains many bear traces of being extinct volcanoes. Two of the most remarkable of these deserve a word of mention. Tafua, the most western mountain in the island, is thus described by Humboldt in his Cosmos, vol. iv. part i. p. 383: "Most remarkable geologically is the Peak of Tafua in the island of Upolu, belonging to the Samoan group. This peak, 2138 feet high, which was first ascended and measured by Dana, has a large crater quite filled with forest trees and crowned by a

regularly rounded cone of ashes." Writing from memory, I think the descent inside the crater is about one-third of the ascent, the trees growing at the bottom and on the inner slopes are ordinary forest trees, while water and other creepers abound. Round the edge of the cone, which is very distinct, the trees are much more stunted, and when I visited it some of the natives of our party cut down a few of them on the outward

slope, and so enabled us to get a glimpse out to sea.

The other crater is one inland from the bay of Faleata, immediately to the west of Apia. Its height is 2570 feet, and within it there is a lake of considerable size and of great depth. There is no outlet to the lake, and the only supply of water to it is from the rainfall. The vegetation round it is very luxuriant, and rare ferns and beautiful orchids are in rich profusion. The native legend as to the origin of the lake is as follows:—"Faleata," the "House of Ata," is a district embracing a number of villages, and was named from a chief Ata. Ata was killed in battle, and his brother Too took it so much to heart, that he went away inland, scooped out a great hollow, and filled it with his tears; and hence the lake there called Lanutoo, or "Lake of Too." 1

Upolu is divided into three states, Atua to the east, Le Tuamasanga in the centre, and Aana to the west, the divisions running right across the island. At the eastern extremity of Upolu are two small islets—Nuutele (large islet), and Nuulua (second islet)—which are unimportant. On Nuutele there are a few inhabitants. The district within the reef enclosing this end of Upolu is called Aleipata, where the titled king of Atua resided. Proceeding down the north side towards the west, the deep bay of Fangaloa is soon reached. It is very little used as an anchorage, as it has the reputation, and rightly so, of being treacherous and unsafe. A little further down the coast, the harbour of Saluafata is situated. It is a small open roadstead, and chiefly remarkable from the fact that exclusive privileges with respect to its use were accorded to Germany by the Treaty between Germany and Samoa of 24th January 1879.

About eight miles below Saluafata is Vailele, one of the largest German plantations on the island. It was in this vicinity that the fight took place between the Samoans and the Germans on the 18th December last.

A little further down the coast is the port of Apia, the capital of Samoa, the residence of the European and American Consuls, and of the principal foreign residents. It is, like Saluafata, an open roadstead, but of much larger size, with good sheltered anchorage during the trade-wind season. In the hurricane season—from December till April—it is a dangerous place, as it is quite open to the north, and thus entirely exposed to these storms, which occasionally blow with great force from that quarter. Vessels caught in this way, are liable to be driven in upon one another, or on shore, or, worse still, on to an inner coral reef which divides the harbour into an eastern and a western portion, and go down in deep water. The disaster of the 16th ultimo, when three German and three

American war-ships, besides several merchant vessels, were wrecked, is a

terrible proof of the reality of this danger.

Apia is a crescent-shaped bay with Matautu Point on the left as you enter, and on the right Mulinuu, a long tongue of land running out and dividing Apia Harbour from the deep bay of Faleata, which is about 6 miles across. From point to point the bay of Apia is about a mile across, but the real harbour is not more than a third of a mile in width. The sand of Apia is black. The Vai Singano River runs into the sea about half a mile from Matautu point, and divides the village of Matautu from that of Apia proper. There is another smaller stream half a mile further

round, in the centre of the bay.

Apia possesses a considerable number of good stores—principally British, German, and American, although several other nationalities are also represented; three or four hotels, an English Protestant and a French Catholic church, and schools in connection with both of them. Mulinuu Point has been in recent years the seat of the Samoan Government, and it was there that the skirmish took place in 1876 between the British and the Samoans. Some miles inland from Apia there are some remarkable stone relics. The road to them leads up through one of the prettiest bits of scenery I have seen anywhere—it is the stream bed of one of the feeders of the Vai Singano, and the profusion of mosses and creepers with which rocks and trees on each bank are covered give one the idea that all the fairies in Samoa must here have recently held a competition in decorative art! The relics themselves are a number of stone pillarsthe remains of a stone house. These pillars form an ellipse after the model of the best Samoan houses. Many other blocks of stone lie scattered about in the vicinity. It is called by the natives "Le Fale o le Fe'e—the house of the Fe'e. The Fe'e or Cuttle-fish were looked upon as war gods, and the legend goes that "a Savaii Fe'e married the daughter of a chief on Upolu, and, for convenience in coming and going, made a hole in the reef, and hence the harbour at Apia. He went up the river also, and built a stone house inland," the relics of which are those just mentioned. In time of war it was said "he sent a branch drifting down the river as a good omen and a sign to the people that they might go on with the war, sure of driving the enemy." 2 If, on the other hand, any attack likely to be disastrous was planned by the enemy, the people were warned of it by mysterious rustling sounds proceeding from the direction of the haunts of this god.

Eight miles west of Apia is Malie, the old capital of the Tuamasanga district, and four miles further on is Malua, the site of the Training College of the London Missionary Society. This college was commenced forty-five years ago. It is carried on by two resident European missionary tutors and one assistant Samoan tutor. The students, who usually number about 100, have to pass an examination before admission, and undergo a four years' course of training. The majority of them are married, and special classes for the students' wives are held. There is also a select class of twenty-five youths from 14 to 18 years of age.

<sup>1</sup> Samoa a Hundred Years ago, p. 31.

The college estate contains 300 acrcs, all under cultivation, bounded by a road three miles in circuit, on either side of which there is a continuous row of cocoanut trees. The estate is worked by the students, and is quite enough to support the entire college community. They have one industrial day during the week, and as the result of the work done on that day there are now 22 stone cottages, 25 other cottages built in Samoan style, a stone class-room, 60 feet by 30, fitted with desks, tables, blackboards, maps, diagrams, and models, and the whole sea frontage of the estate is surrounded with a substantial stone embankment. With the exception of the salaries of the tutors, the entire college is self-supporting.

During the forty-five years that this college has been in existence, there have been trained in it over 900 men, 650 women, and 300 boys. Of these about 200 are now acting as ordained native ministers at the different villages scattered over the Samoan group. They act also as village school teachers, and it is no exaggeration to say that nine-tenths of the education which the Samoan race of the present day possesses, has been imparted to it by these native teachers trained at this institution. Young men from some twenty-seven other islands, outside of the Samoan group, from 200 to 2000 miles away, have been trained here, and after staying their allotted time have returned to help in the education of their

countrymen.

A little west of Malua is the boundary of the Tuamasanga district, and four miles further on is Leulumoenga, the capital of the third district of Upolu,—Aana. This district is much flatter and not nearly so well watered as the other two. Between Upolu and Savaii, the remaining large island of the Samoan group, lie the two small islands of Manono and Apolima. The reef at the west end of Upolu extends out to, and includes Manono. This island is three miles in circumference. It is circular in shape, and rises gradually from the sea to a height of about 200 feet in the centre. It is well wooded. Breadfruit trees, cocoanuts, and bananas are in great abundance, and it is famed for the growth of yams. This small island long played a conspicuous part in the political history of the group. This was mainly owing to the possession of the natural fortress of Apolima, which lies between Manono and Savaii.

Apolima is a very remarkable little island. It is evidently the crater of an extinct volcano. Perpendicular cliffs rise abruptly out of the sea, broken down at a single point on the northern side where the waters of the ocean obtain admission, and through which there is only room for one boat at a time to pass to the basin of smooth water within. The inner slopes of this crater are covered with vegetation, and this is the

home of about 250 or 300 people.

The distance between Manono and Apolima is not quite a mile. The Manono reefs extend about one-eighth of a mile in the direction of Apolima, and terminate in a small uninhabited islet called Nuulopa. The remainder of the channel is clear for ships of any size. It is safer, however, for vessels to take the other side of Apolima, the distance between it and Savaii being about 7 miles. There is a small rock about 200 yards west of Apolima, and the Savaii reef runs out nearly 3 miles, but between these there is a deep channel from 4 to 5 miles in width.

The population of Upolu, Manono, and Apolima, which are usually taken

together, is a little short of 17,000.

Savaii is the largest and most westerly island of the group. It measures about 40 miles from east to west, by 20 from north to south. Its area is 657 square miles and its population 12,500. Commodore Wilkes, in his report of the exploring expedition sent out by the United States Government in 1839 for the purpose of surveying these islands, thus describes this island: "It differs from any of the others in its appearance, for its shore is low, and the ascent thence to the centre is gradual, except where the cones of a few extinct craters are seen. In the middle of the island a peak rises, which is almost continually enveloped in clouds, and is the highest land in the group." Its height is considerably over 4000 feet. "Another marked difference between Savaii and the other large islands is the want of any permanent streams, a circumstance which may be explained, notwithstanding the frequency of rain, by the porous nature of the rock (vesicular lava) of which it is chiefly composed; water, however, gushes out near the shore in copious springs, and when heavy and continued rains have occurred streams are found in the ravines, but these soon disappear after the rains have ceased. The coral reef attached to this island is interrupted to the south and west, where the surf beats full upon the rocky shore. There are in consequence but few places where boats can land, and only one harbour for ships, that of Matautu: even this is unsafe from November to February, when the north-westerly gales prevail. The soil is fertile, and was composed, in every part of the island that was visited, of decomposed volcanic rock and vegetable mould." This description is a very accurate one; the only exception that I feel ought to be taken to it is, that there is one goodsized river, perhaps the largest in Samoa, on the south side of the island, falling into the sea at Tufu.

Savaii is frequently politely called in prose and poetry Sa Lafai, "sacred to Lafai," who was one of their legendary chiefs. It is divided into three political divisions, Le Faasaleleanga, of which the capital is Safotulafai; Le itu o tane, with its capital Saleaula; and Le itu o fafine, the capital of which is Palauli. The last two names mean respectively the side of men and the side of women, the former name having been given to the north side on account of their bravery in the war against Aana in 1830.

In the north-west of the island there is a tract of country called O le mu, or "the burnt," which is a lava plain of comparatively recent origin. It is divided into two portions, the village of Aopo being between the two, the smaller stream having found its way to the sea to the east of the village, and the larger one to the west of it. Vegetation has only recently commenced over these lava plains, and the estimate made from native accounts that this eruption took place a little over 100 years ago is probably correct.

Falcalupo is the settlement at the extreme west of Savaii. It had a fame of its own in olden days. "There were two circular openings among the rocks near the beach at this village, where the souls of the departed were supposed to find an entrance to the world of spirits, away under the ocean, and which they called Pulotu. The chiefs went down

the larger of the two, and the common people had the smaller one. They were conveyed thither by a band of spirits who hovered over the house where they died, and took a straight course in the bush westward. There is a stone at the west end of Upolu, called 'the leaping-stone,' from which spirits in their course leaped into the sea, swam to Manono, leaped from a stone on that island again, crossed to Savaii, and went overland to the  $Faf\bar{a}$  at Falealupo, as the entrance to their Hades was called. The villagers in that neighbourhood kept the cocoanut leaf blinds of their houses all closely shut down after dark, so as to keep out the spirits supposed to be constantly passing to and fro."  $^{1}$ 

The climate of Samoa is fairly good. The average temperature at mid-day, taken inside a well-ventilated stone house, is 86°, it never rises above 93°, and it never falls below 80°. At night it is not much cooler. July, August, and September are the coolest months in the year, and February the hottest. During the greater part of the year a fresh trade wind, which veers from south-south-east to north-east, is constantly blowing, and makes the temperature bearable. The most trying season is from November to February, when often there are days together of still, sultry, oppressive weather. Between the months of December and April long-continued and heavy rains are frequent, attended at times with high winds and northerly gales. Occasionally, too, destructive hurricanes occur. They are not so frequent in Samoa, however, as they are a little further south. Hardly a year passes without one of these gales, of more or less severity, passing over some part of the belt between 10° and 20° south latitude. In April 1850 one swept right over the centre of Upolu. Three vessels lying at anchor in Apia harbour were driven on shore, but all on board of them were saved, with one exception—a Rarotongan, who leaped overboard in the night, thinking he might reach the shore. He was never seen again. Another occurred in January 1865, during which a German barque, the Alster, lying in Apia harbour, dragged her anchors, struck on the inner reef during the night, and went down immediately. Of her crew of fourteen, one was found in the morning on board a small vessel that was at anchor inside where the Alster lay-nearer the shore. He could give no account of himself, nor of the calamity that had befallen the Alster, but there he was alive, providentially washed on board. Of all his shipmates not one even of the bodics was ever found. The next cyclone which visited Apia was in March 1879, but the few vessels at anchor in the roadstead at that time successfully rode out the galc. In March 1883 another severe storm occurred, in which several vessels and ten lives were lost. now we have news of the terrible disaster of 16th ultimo, with its record of the wreck of three German warships, the Olga, the Adler, and the Eber, three American warships, the *Nipsic*, the *Vandalia*, and the *Trenton*, along with eight merchant vessels, and 150 lives—H.M.S. Calliope being the only ship in the harbour which escaped, and that owing to the brave daring of her commander, who succeeded in steaming his vessel out in the teeth of the hurricane, and against a tremendous head sea.

<sup>1</sup> Samoa a Hundred Years ago, p. 257.

Samoa is subject to frequent shocks of earthquake. There will probably be, on an average, about three or four each year. The shocks are generally double, and consist merely of a tremulous horizontal motion lasting from a few seconds to about one minute. During twelve years residence I only once felt, during an earthquake, anything of a heaving movement. There is neither fact nor tradition of houses being thrown down or lives lost by them.

The fauna of Samoa is extremely meagre, while the flora, as can well be imagined, is exceedingly rich. The only indigenous quadruped is a small rat, something between a mouse and the Norwegian rat, the latter of which was introduced some years ago. There are four species of land snakes; one is three or four feet long, and another, about a foot long. None are venomous. Forty-eight species of birds exist. Some of them are very beautiful. The most rare is the manumea (Didunculus Strigirostris), the nearest living relative of the extinct dodo. Its plumage is a rich ehocolate brown on back and wings, with brilliant dark blue and green over its head, neck, and chest. Its size is that of a large pigeon. The lower part of its beak has three deep serrations at each side. It is rapidly becoming extinct, and a full-grown specimen fetches at Apia a price of £5 to £10.

The Punae (Pareudiastes Pacificus) is another rare bird. It is said to burrow in the ground. Wild pigeons of a large species (Carpophaga Pacifica) abound in the bush, and are much prized as an article of food, their flavour being delicious. One dove, called the Manu-mā (Ptilonopus Perousei), is very resplendent. The crown of its head is a bright purple, its back, wings, and tail a pale green, breast white, yellow, and purple intermingled, and the under part of its body is of a very pale grey, with a little tuft of yellow feathers under the tail. There are other doves, two varieties of paroquets, two species of kingfisher, a large bat, and

other birds, which I cannot take time to enumerate.

Of fish and shellfish there is great abundance. To the natives, the greatest delicacy they obtain from the sea is the Palolo (Palolo viridis), a sea-worm found at certain openings of the reef for only a few hours on the morning after the third quartering of the moon in October and

November of each year.

Of timber trees there are many valuable kinds, such as the toa (Casuarina equisetifolia), the fetau, a native mahogany (Calophyllum inophyllum), and the ifilele (Afzelia bijuga), all hard woods. Of shrubs also many useful and ornamental plants exist, such as the lama or candlenut (Aleurites Moluccana), which indeed is more of a tree than a shrub, the u'a or paper-mulberry (Broussonetia papyrifera), the ti, from the leaves of which girdles are made (Cordyline terminalis), and the tane-tane (Nothopanax Samoense), one of the most ornamental of bushes.

In ferns, mosses, creepers, and orchids, Samoa is very rich.

Of fruits there are very many—cocoanut, orange, banana (a great many varieties), pinc-apple, custard-apple, papaw-apple, guava, mango, avocado pear, lime, citron, and many more. Some of these are indigenous, others have been introduced. Sugar-cane, cotton, coffee, cinnamon, and nutmeg, all grow exceedingly well—of the last named three or four varieties grow wild.

With regard to vegetables also the Samoans are well off. Talo (Arum esculentum) is the finest of these. It grows in the swamps, and does not require much cultivation. The bread-fruit trees bear spontaneously, and furnish food for nearly six months in the year, and yams, sweet potatoes, maize, arrowroot, melons, and pumpkins, are cultivated by the natives for their own use and for sale.

Of plantations owned and cultivated by Europeans and Americans, the largest are those of the Dentsche Handels- und Plantagen-Gesellschaft at Vailele, and Le Mulifanua, in both of which places they have over 2000 acres under cultivation, and that of Messrs. M'Arthur & Company

of Auckland at Mangia, the extent of which is about 800 acres.

The Samoans are one of a number of races in the Pacific which are known as Malayo-Polynesians. According to the view now very generally accepted, these races are all offshoots of a family which populated some portion of south-eastern Asia, probably about the Malay Peninsula, and which at some remote period, almost certainly over 3000 years ago, found their way to the Pacific. It would appear from data at our command that Samoa was one of the first groups to be inhabited, and that from this centre the Polynesian race was distributed over the Pacific. The Maoris of New Zealand, for example, trace their origin distinctly to Samoa.

Two descriptions of the Samoans are given in the British Blue Book on Samoan affairs presented to both Honses of Parliament during last month. In a memorandum which was drawn up a few years ago by a gentleman who was in Samoa as British Deputy Commissioner it is said, "they are a fine, tall race, of light brown colour. They are docile, truthful, hospitable, and are lively and vivacious in conversation among themselves, and in their intercourse with foreigners they are exceedingly conrteous and polite."

In commenting upon the above another British Commissioner says: "The only exception I take to the accuracy of this description is to the word 'truthful.' The Samoans are an excitable, voluble, credulous people, much given to lying and the circulation of false or extravagant rumours. In some degree they are thieves by instinct, and in many cases are so now by necessity."

The truth is to be found somewhere between these two estimates. I am quite sure that in so far as truthfulness and honesty are concerned the Samoans will compare not unfavourably even with our own countrymen.

They are physically well-formed, have straight hair, regular features, and are very much like Europeans in expression. Mentally they are possessed of much ability, and are capable, under favourable circumstances, of great improvement. They are one of the most polite races on the face of the earth. This is shown in a great many ways, perhaps in none more so than in their language. Special words are used in addressing persons of rank, and in many cases the particular grade of a man's rank is indicated by the word used. For the words to come, for example, four different phrases are in constant use—sau is used to a common man, maliu mai is a respectful form used to those a grade higher, susu mai is only used to titled chiefs, and afto mai is reserved for those of highest

rank. So with the word *illness*, if a eommon person is ill his ma'i is spoken of, gasegase is a more respectful term, while to higher chiefs the words faatafa or pulupulusi would be used. Every member of a chief's body has a name different from that applied in the case of a common man. His feelings, his actions, and his possessions have different names, and in innumerable instances the common name of a thing is changed for another when that thing is spoken of in his presence. But chiefs in speaking of themselves always use the common language. The language itself, which exhibits many other interesting peculiarities, is a very smooth one, and has been called "the Italian of the Pacific."

In the narrative of Roggewein's voyage of 1722 these natives are thus described: "They were clothed from the waist downwards with fringes and a kind of silken stuff artificially wrought." Had they approached them a little closer, it would have been found that the fringes were their ti-girdles made from the leaves of the ti plant (Cordyline terminalis), and the "kind of silken stuff" the tattooing with which all Samoan adult men were covered from the waist down to the knee. This was variegated here and there with stripes and patches of the untattooed skin, each professional tattooer having his own designs, and in the distance it made them appear as though they had on black silk knee-breeches. This custom has in recent years very largely been abandoned.

In time of actual warfare the Samoans are treacherous and ernel: they immediately decapitate any of their enemies who fall into their hands. At other times they are kind and generous to a degree. A good illustration of their character is given in the cablegrams of last week relating the particulars of the wreck of the warships. The German corvette Olga was driven on shore, and we are told that subsequently Mataafa, the native chief against whom the Germans had been fighting, "sent a number of his men to the shore, who rendered splendid service in the combined effort made to get her off the beach."

The first correct census made was in 1843, which showed that the entire population of the group numbered 33,900. The last census of which I have been able to obtain notes was taken in 1875, and was as follows:—

| Savaii, .   |         |        |        |        |       |     |   | 12,530 |
|-------------|---------|--------|--------|--------|-------|-----|---|--------|
| Upolu, with | Manoi   | no and | d Apo  | lima,  |       |     |   | 16,568 |
| Tutnila, wi | th Aunu | au,    |        |        |       |     | • | 3,746  |
| Manu'a, .   |         |        |        |        |       |     | • | 1,421  |
|             |         |        |        |        |       |     |   | 34,265 |
| Europeans   | and Am  | ericai | ıs, .  |        |       | 204 |   | ĺ      |
| Natives of  | other P | olyne  | sian I | slands | s, of |     |   |        |
| whom 47     |         |        |        |        |       |     |   |        |
| tions, .    |         |        |        | •      | •     | 711 |   |        |
| Asiatics, . | •       |        |        | •      | •     | 4   |   |        |
|             |         |        |        |        |       |     |   | 919    |
|             |         |        |        |        |       |     |   | 35,184 |

<sup>&</sup>lt;sup>1</sup> The labourers on German plantations alone now number about 1000.

From this it will be seen that during the period of 32 years, the population had slightly increased notwithstanding that two long civil wars had been fought, involving the loss of many lives in actual warfare, and many more in consequence of discase and shortness of food, the result of the bush life many of them had to lead during the fighting.

The Samoans are now all nominally Christian. Missionaries of the London Missionary Society, the Wesleyan Missionary Society, and the French Roman Catholic missions, have long been working there, and the census of 1875, already referred to, gave the following to be the number

of the adherents of these bodies respectively:-

| London Missionary | Soc | ciety, |  | 26,493 |
|-------------------|-----|--------|--|--------|
| Wesleyans, .      |     |        |  | 4794   |
| Roman Catholics,  |     |        |  | 2852   |

There were also a few on Tutuila who professed to be Mormons!

Regarding Samoan commerce, it is a very difficult matter to get at the real facts as to the amount of the exports and imports of the group, partly on account of the rivalry between German and British traders, each trying to magnify his own and depreciate his neighbour's business, and partly from the fact that Apia is the depôt of the German Polynesian Company. German statistics often include imports for the supply of trading stations hundreds of miles away, and German traders frequently represent as Samoan products and evidences of German interests in Samoa, all produce of the South Sea Islands transhipped at Samoa, no matter from where they are brought. The following statistics, taken from the Blue Book already referred to, and compiled by the British Commissioner, are as accurate, probably, as any to be obtained.

The value of the trade of resident British subjects was:-

| In | 1883, | Imports, | £9,103, | Exports, | £1,180 |
|----|-------|----------|---------|----------|--------|
| 22 | 1884, | ,,       | 10,982, | "        | 2,005  |
| "  | 1885, | ,,       | 27,733, | ,,       | 8,767  |

"But," it is added, "these figures cannot be said to furnish that degree of information which is so much desired. It appears that the larger part of British trade with natives is for cash, and there are no returns procurable showing the value of remittances by cash and drafts. This circumstance serves to explain the discrepancy between the value of British imports and exports." Of German trade it is said the official returns furnished by the German Consulate at Apia for the year 1885 show £56,324 as imports, and £58,890 as exports. It is added, however: "These figures include imports for the supply of trading stations in 'Samoa and the adjacent islands,' by which is understood all islands south of the equator. In the same manner the exports give the products of both Samoa and the adjacent islands (excluding Tonga, Fiji, and Jaluit). . . . It is, however, declared in Samoa by competent authority, and I believe with truth, that at the outside not more than one-third of the copra exported by the German firms is the produce of Samoa, the other portion being conveyed to Apia for transhipment from widely scattered spots described as 'adjacent islands.'" The trade with America is much smaller than with either Britain or Germany, but it is increasing.

By far the largest quantity of produce exported is copra and cotton. Copra is the kernel of the ripe cocoa-nut sliced and dried in the sun. From it there is expressed, in this country and in Germany, cocoanut oil, and the residue is known as oil-cake, and used for feeding cattle. The imports cover a wide range, in which manufactured goods, iron goods, provisions, tobacco, and timber bulk most largely.

In former days law and order in Samoa were in a fair manner maintained by the union of two things—civil power and superstitious fear. The latter was an auxiliary to the former, and consisted mainly of an elaborate

system of superstitial taboo.

Their government had more of the patriarchal and democratic in it than of the monarchical. In each village there would be a number of titled heads of families, and one of the higher rank called chiefs. The titles of the heads of families are not hereditary. The chiefs, on the other hand, are a most select class, whose pedigree is most carefully traced in their traditional genealogies. One is chosen to bear the title, though there may be others who trace their origin to the same stock, and any of whom may succeed to the title on the death of the one who bears it.

The chief of the village and the heads of families formed the legislative body of the place. These village communities, in numbers of eight or ten, were united for mutual protection into a district, and several districts were joined to form a state. One village was known as the capital of the state, and it was usual to have resident there a higher chief than any of the rest, who bore a title analogous to that of king. Occasionally one chief would have the highest title of two or more of these states, but it has been very rarely in the history of Samoa that all the highest titles were borne by a single chief.

The first Samoan hero who is pre-eminent in tradition, was a chief of Savaii, Manono, and the Tuamasanga called Savea. Samoa had been invaded by the Tongans, who had obtained the mastery over them. Several versions of the story are given, but all agree that Savea led the Samoans against the Tongans, routed them and drove them from the islands, and in recognition of his bravery, the title of Malietoa, Pleasing Hero, was originated. From Savea, the first Malietoa, there follow twenty generations of Malietoa down to Malietoa Fitu Semani, the chief who received the missionaries Williams and Barff in 1830. He had all the Royal titles of Samoa. He was succeeded by his son Tavita, who also had all the titles. About 1866 Malietoa Molī, a brother and successor of Tavita, died, and there were two candidates for the vacant title, Laupepa, son of Molī, and Talavou, an uncle of Laupepa. War broke out in 1868 between the partisans of these two chiefs, and went on for five years.

It was during this war that land began to be sold recklessly by the natives. It is true that a good deal of land had been sold by them previously, but only in small quantities, at a fair price, and in a regular way. About this time a representative of an American company called the Polynesian Land and Commercial Company, arrived in Samoa, and offered to buy land from any one who would sell. A mania for selling land set in. The natives were anxious to get superior arms and ammunition

for the war, and when they found that all they had to do, in order to get what they wanted, was to say they had a piece of land to sell, give its name and its approximate dimensions, and sign their name, they floeked in hundreds to the buyers. In innumerable instances large traets of land were sold by persons who had no right to dispose of them, and in many eases the price given was at least as low as one shilling and sixpence per aere.

The Germans and others followed the lead of the American Company in buying up all the lands they could, and I have heard of instances where a piece of land was sold two or three times on the same day to different buyers. There was no public notification of the lands bought, and no attempts to prevent overlapping. Next to the American Company, the largest purchasers of land were the firm of Messrs. J. C. Goddefroy & Son of Hamburgh, who about the year 1857 had established themselves in Samoa, and at the time now referred to had a large business

in the group.

In 1873 the Samoans, in deference to the entreaties of the Consuls and Missionaries, agreed to give up hostilities. With a view to prevent the recurrence of these civil strifes, a proposal was made and accepted, that all parties should unite in setting up a government for the whole group. A constitution was adopted consisting of a House of Representatives and a House of Nobles, and in order to unite and please all parties and give a better chance of a stable government, it was resolved to choose, as joint kings, one of the Malietoas, and a chief of another ancient Samoan royal stock, that of Tupua. Chiefs of this Tupua stock had been ruling kings of the state of Atua even before the time of the first Malietoa, and it was with the view of coneiliating that important state, and their political ally the state of Aana, and preventing the recurrence of the ancient fend between Atua and Aana on the one side, and the Malietoa states of Le Tuamasanga, Manono, and Savaii on the other, that this proposal of joint kings was adopted. A chief called Pulepule of the Tupua family was elected as the one king, and Malietoa Laupepa the other, the unele of the latter, Talavou, retiring in dudgeon to Savaii. This government had just been formed when complications from a new and unexpected quarter arose. Presumably in consequence of representations made by the Land and Commercial Company to the United States Government, Colonel Steinberger was sent out to Samoa "in the eapaeity of special agent, to make observation and report upon the character and condition of their inhabitants." 1 This gentleman, who arrived at the islands in a ship-of-war, represented himself as having been sent out by the American Government to pave the way for the establishment of a protectorate by that country over Samoa. The natives, who had, on more than one occasion previously, petitioned for a British protectorate, hailed the idea with delight. They felt the task of governing themselves, without assistance, was beyond them; they feared the ever-increasing German influence, and they said, "if we cannot get the mother (Britain) to help us, let us get the daughter

<sup>&</sup>lt;sup>1</sup> Extract from a letter received by S. S. Foster, Esq., Consul of the United States, Samoa, from the United States Government.

(United States)." Steinberger went back to America with his report, and some months afterwards (early in 1875) returned to Samoa, the bearer of a number of presents from the United States Government to the natives. On this occasion his instructions were, "your functions will be limited to observing and reporting upon Samoan affairs, and to impressing those in authority there with the lively interest which we take in their happiness and welfare." Two months before these instructions were written, Steinberger had, as was afterwards discovered, entered into a mercantile agreement with the Messrs. Goddefroy, in Hamburgh, "to establish a government in Samoa, and to identify the interests of the Samoan Government with that of the establishment of this firm at Apia." I quote from an article on Samoa, by Mr. C. Kinloch Cooke, in The Nineteenth Century for February 1886, in which the full text of this agreement is given. With the opposition of the Germans thus disarmed, Steinberger carried everything before him. He persuaded the natives to alter their constitution. Satisfying himself that Malietoa was the chief having the greatest influence in the group, he got them to choose one king to rule for a period of seven years. Malietoa Laupepa was chosen, and Steinberger was, by acclamation, elected his premier. Probably he thought that before seven years had expired his power would be so established that he would be able to do without a king! But, if so, he reckoned without his host! Suspicious rumours as to his true character became rife. He was called upon to produce his credentials, but was unable to do so. King Malietoa rose to the occasion. He appealed to the United States consul to arrest and deport Steinberger, and this was done. At this, his supporters were furious. In their first outburst of rage they drove Malietoa from the throne, and again civil war broke out. It was at this juncture, while trying to mediate with the Steinberger party in favour of Malietoa, that the captain of H.M.S. Barracouta came into collision with the natives as previously referred to. The war continued till 1879, when the party of Malietoa, having again got the best of the fighting, Captain Deinhardt, of H.I.G.M.S. Bismarck, acting on behalf of the representatives of the United States and Great Britain as well as Germany, interfered in the strife, and the war was brought to a close. Malietoa Talavou was declared to be king for life, with Malietoa Laupepa-who had given up the highest position to his uncle in order to heal the family feuds—as Regent. This Government was recognised by the three Powers just mentioned.

Meantime, and while the civil war was being fought, treaties had been entered into between the *de facto* Governments of Samoa with the United States on 17th January 1878, with Germany on 24th January 1879, and

with Great Britain on 27th August 1879.

In the first of these three treaties, the United States had confirmed to them the right to use Pangopango harbour as a naval and coaling station, which right had already been conceded to them in 1870 by an agreement made between Maunga of Tutuila and Captain Meade of the U.S.S. Narragansett.

In the second of these treaties, the Germans obtained the exclusive use of Saluafata harbour, and in the third the following Article occurs:—

"ART. VIII.—Her Majesty the Queen of Great Britain may, if she think fit, establish on the shores of a Samoan harbour, to be hereafter designated by Her Majesty, a naval station and coaling depôt; but this Article shall not apply to the harbours of Apia or Saluafata, or to that part of the harbour of Pangopango which may be hereafter selected by the Government of the United States as a station, etc." Each of the three treaties also contain a most favoured nation clause. In the end of 1880 Malietoa Talavou died, and was succeeded, early in 1881, by Malietoa Laupepa.

The partisans of the Tupna family again gave some trouble. Pule-pule was dead, but they brought forward as their candidate a chief called Tamasese. He was not recognised, however, by the Consuls, who gave their support to Malietoa, and in July 1881 both native parties made up matters. Malietoa Laupepa was accepted as King, and recognised as such by the Treaty Powers, and Tamasese was appointed as Vice-King.

Still things did not go on smoothly. The native Government consisted of too many discordant elements to permit of its succeeding without foreign assistance, and foreign intervention was too often employed in a way which simply made matters worse. It is impossible to give even a résumé of the more important events of the next few years. One reads of the King and Vice-King signing another treaty with Germany, and a few weeks afterwards sending a piteous protest to the German Emperor, saying that they had only signed the treaty "on account of fear, and through being constantly threatened"; of this treaty being disallowed by England and America; of another petition to Britain for annexation which could not be accepted; and of Tamasese breaking off from Malietoa, and setting up an opposition government at Leulumoenga, and

of his being supported in his action by the Germans.

Meantime negotiations had been proceeding between the Treaty Powers with a view to some satisfactory settlement of the question. delimitation treaty, by which it was formally agreed that Samoa and some other groups should be declared absolutely neutral territory, was in 1886 signed by Germany and Great Britain. Commissioners of the Treaty Powers were sent to Samoa to personally gather all information on the subject, and a conference of representatives of these Powers met in Washington early in 1887. No conclusion could be arrived at. German squadron of four ships reached Samoa on 20th August 1887, and three days later a demand was made on Malictoa for \$13,000 (£2600), \$1000 being a fine for certain Germans who had been wounded in a brawl with Samoans a short time previously, and \$12,000 for alleged depredations committed during the previous four years on the property of Germans. A reply was required in twenty-four hours. Malietoa begged for a few days' time. This was refused, and next day war was declared against him. He fled to the bush, and the Germans brought Tamasese up to Apia and proclaimed him king. At the end of three weeks' time Malietoa voluntarily gave himself up to the Germans, and was deported from Samoa. In the proclamation which he issued when yielding himself into eaptivity, he says that he does so "on account of my great love for my country and my great affection to all Samoa. . . . I do not desire that the blood of Samoa shall be again

spilt for me." Malietoa was taken first to the Cameroons, but now it is understood that he is on one of the Marshall Islands.

There was quictness for a short time in Samoa after this; but ere long the Malietoa party again rose and made war on Tamasese. On this occasion they were headed by a chief called Mataafa, who is connected with the Malietoa family by birth, and with the Tupua family by adoption. At first the Germans allowed the natives to fight the matter out among themselves; but on the 17th December last, it is said the German ship of war *Eber* shelled the headquarters of Mataafa on account of some trespassing on German plantations; and next day a German force of about 150 landed with the intention of disarming Mataafa's men, and the issue was the fight of that day with its sad results, and all the complications which have since ensued.

Another conference is to be held in a few weeks in Berlin, and while we await its assembling, it is only natural to ask why the Washington

Conference was nugatory as to results.

It would seem that the position taken by the Germans was that the only solution of the difficulty could be in the assumption of the Government of the islands by one of the Powers in the name and on behalf of the Samoan king; and that the Power assuming such control should be Germany, on account of her preponderating interests in the group. The British Government, it would seem, was not indisposed to allow Germany some such mandatory powers, admitting her preponderating The position of the United States, on the other hand, is best given in their Commissioner's own words, "If it were true that German interests did predominate, it would be, to my mind, an additional reason why Germany should not be allowed to control the Government, and there are reasons why the British Government should not be selected for the sole control of these islands. As is the case with Germany, so Great Britain is pursuing a policy of the annexation and acquisition of the South Pacific Islands, which renders it incumbent upon the United States, if they desire absolutely to secure the future autonomy and neutrality of this group, to object to the assumption by either of these powers of the absolute control of the Samoan Government, even under the most guarded treaty. The only solution of this difficulty that I can see is, that the other powers shall consent to the selection of the United States, as a single power, to exercise the necessary oversight in connection with the new government to be formed. The freedom of our country from any disposition to absorb territory in that region was fully recognised by the representatives both of Great Britain and Germany. The fact that our concern in the matter does not arise from the preponderance of the interests of our citizens, but solely from a desire, arising from a national policy, to preserve the independence and neutrality of this group, is a reason why there should be a greater degree of confidence in the disinterested action of our Government, and the conservation of the interests of the native population, to whom the country really belongs, as well as those of foreigners who have located themselves and their business interests there."1

<sup>1</sup> Samoa, No. 1, 1889.

This argument is not a little amusing. And yet, is there not a great deal of reason in it? I think the Samoans would think so!

It is argued that German interests predominate. Let us look for a

moment at this question.

This shows that until some investigation of the question of land purchases is held, it is impossible to say which nationality owns the most.

But it is argued that the Germans have sunk much capital in improving their lands, while a very small proportion of British and American owned lands have been cultivated. This is true, and yet it ought to be remembered "that British interests have been retarded by the disability of British subjects to procure Polynesian labourers, and to sell alcoholic liquors, arms, and ammunition to natives."

But is "the Almighty Dollar" to be the only factor in the case? Are the wishes of the Samoans themselves to count for nothing? Is it to count for nothing that they have over and over again applied to Britain for protection, and that they would hail with delight a British or an American Protectorate, while they would view with very different feelings the establishment of German rule in their midst? And is it to count for nothing that almost all the education and culture the Samoans possess have been derived by them from British missionaries?

To my mind, the following would seem to be the most satisfactory

solution of this vexed question:-

1. Let an international Land Commission be appointed, consisting of one representative of each of the three Treaty Powers and one Samoan. Let there be a thoroughly impartial investigation into all past land purchases, and into all cases of a recently introduced system of getting the natives to mortgage their communal (village) lands and their crops. This would be a gigantic and expensive work, and yet it is the first step necessary to put matters right. It must be evident to every one that the land question is the most fruitful source of the constantly recurring troubles between the Samoans and Foreign Powers. And surely the expense necessary for such a commission ought not to be mentioned in comparison with the loss of life and money, which is the result of the present system of simply allowing matters to drift.

2. Inasmuch as certain conditions contained in the different Treaties between Samoa and the Treaty Powers are such as to make it impossible for any adequate revenue for the purposes of administration to be raised, and for any local Government to be formed which would deserve recognition, the Treaty Powers should agree to give up such of the provisions

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of the respective treaties as bar the imposition of taxes or duties, without which the expenses of no Government, however simple, can be met.

- 3. The Samoans should be invited again to choose their own king, Malietoa Laupepa being returned by Germany to Samoa from his exile, and being declared eligible for election. Malietoa Laupepa is fifty-five years of age. He was, when a youth, seven years under training at the Malua College, and is one of the most intelligent and reliable of Samoan chiefs. Tamasese is sixty-five years of age. He is more a Samoan of the old school, not having had the early advantages which Laupepa had. Mataafa is sixty years old.
- 4. The Treaty Powers should, on a footing of absolute equality, agree to assist the natives in governing Samoa, by each sending out one representative, who should be independent of the Consul representing his nation; and these representatives should, with the Samoan king, form the executive of the new Samoan Government. This would, of course, necessitate the drawing out of a new constitution, and its adoption by the natives.

5. The Samoans should be induced to disarm, and all importation of

arms and ammunition should be rigidly prohibited.

Let us hope that, for the sake of our common humanity, the three Powers will be able, at their coming conference, on some such basis as I have here sketched, to come to an agreement which will be honourable to all concerned, and which will cause happiness and prosperity to once more dawn on Samoa.



